

Telotristat Etiprate Appears to Halt Carcinoid Heart Disease

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Background and Objectives

Carcinoid Heart Disease (CHD) is a serious complication of the Carcinoid Syndrome (it occurs in as many as 50% of patients during the course of their disease). **46%-70% of cases operated with bioprosthetic valves develop recurrent carcinoid valvulopathy on the newly implanted tissue valves**^{1,2}. Until now, only mechanical prosthetic valves avoid recurrent fibrosis. **Aim(s):** To demonstrate the effects of **telotristat etiprate**, a tryptophan hydroxylase inhibitor, on **serotonin levels and the course of CHD**.

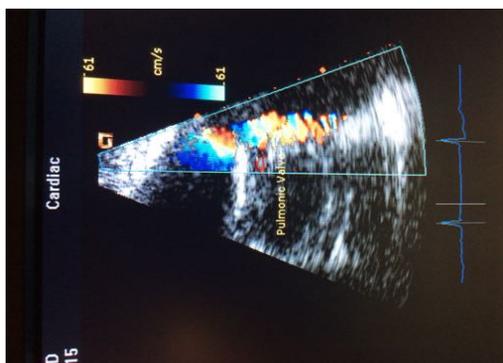
1 ENETS 2014 poster, Zacks et al; 2 ENETS 2015 poster, Glasberg and Gross et al

Methods

2 patients with CHD were among those entered in the **TELESTAR** phase III trial. One demonstrated carcinoid valve disease on the **native** tricuspid and pulmonic valves, suggesting the likelihood that valve surgery might be imminent; the other demonstrated **recurrent carcinoid valve disease** on the tricuspid and pulmonic **bioprosthetic** (tissue) replaced valves. We studied telotristat etiprate's effect upon **biomarkers** and **valve disease progression** as seen on **serial echo studies**.

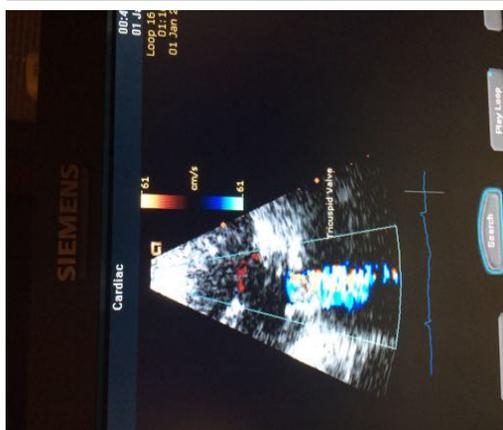
Results

Both patients demonstrated **no significant progression** of valvulopathy on serial echocardiographic studies since enrollment in the TELESTAR trial and continued treatment with **telotristat etiprate**.



Patient A
73yo female/ valve
surgery contemplated

Recurrent CHD on Pulmonic and Tricuspid valves



Patient B/ 56 yo
male/ SPTR PR

LAR = Sandostatin LAR HAE = hepatic artery embolization. * Carcinoid Crisis. ** fibrosed, retracted. *** Bio valve

Conclusions

Carcinoid Heart Disease is a frequent complication of the Carcinoid Syndrome. **Telotristat etiprate** reduces serotonin to levels which appear subthreshold to that which stimulates fibrosis associated with CHD³. This drug might prevent the need for valve surgery in many cases, and enable the use of bioprosthetic valves in others, without recurrent fibrosis.

³ A review of % reduction of u5HIAA or serotonin in 5 CHD patients from TELESTAR and TELECAST revealed a **47-90%** reduction of these markers from their pre-telotristat levels.